

DETERMINATION OF PLANTS COLLECTED IN COLOMBIA BY F. W. PENNELL  
in 1917 (including Rusby & Pennell).

- Pennell 84. *Boerhaavia erecta* L.  
 115. *Rivina humilis* L.  
 363. *Chamissoa altissima* (Jacq.) H. B. K.  
 501. *Drymaria cordata* (L.) Willd.  
 545. *Bocconia frutescens* L.  
 559. *Arenaria lanuginosa* (Mx.) Rohrb.  
 607. *Coriaria thymifolia* Willd.  
 622. *Drymaria cordata* (L.) Willd.  
 642. *Ranunculus praemorsus* DC.  
 644. *Drymaria gracilis* C. & S.  
 691. *Passiflora mollissima* (H. B. K.) Bailey.  
  
 698. *Hedyosmum bonplandianum* H. B. K.  
  
 715. *Cardamine flaccida* C. & S.  
 742. *Muhlenbeckia tamnifolia* (H.B.K.) Meisn.  
 802. *Hedyosmum scabrum* (R. & P.) Solms.  
 811. *Clematis dioica* L.?  
 1057. *Weinmannia crenata* Presl.  
 1130. *Hirtella paniculata* Sw.  
 1267. *Alchemilla aphanoides* Mutis.  
 1267a.       "       "       "  
 1275. *Acaena elongata* L.  
 1284. *Muhlenbeckia tamnifolia* (H. B. K.) Meisn.  
 1322. *Arenaria lanuginosa* (Mx.) Rohrb.  
 1563. *Drymaria cordata* (L.) Willd.  
 1567. *Microtea debilis* Sw.  
 1733. *Drymaria gracilis* C & S.  
 1742. *Valeriana gracilis* Benth.  
 1755.       "       "       "  
 1776. *Arenaria lanuginosa* (Mx.) Rohrb.  
 1897. *Drimys winteri* Forst.  
 1928. *Sisymbrium solidagineum* Tr. & Pl.  
 1954. *Cardamine ovata* Benth.  
 1987. *Cerastium glutinosum laxum* Tr. & Pl.  
 2078.       "       "       "  
 2084. *Alchemilla nivalis* H. B. K.  
 2117. *Muhlenbeckia tamnifolia* (H. B. K.) Meisn.  
 2160. *Ranunculus bonariensis* Poir.  
 2170.       "       *flagelliformis* Sm.  
 2186.       "       *peruvianus* Pers.  
 2232. *Alchemilla nivalis* H. B. K.  
 2252. *Valeriana mutisiana* (Wedd.) Hoeck.  
 2253. *Berberis glauca* H. B. K.  
 2267. *Acaena cylindrostachya* R. & P.  
 2284. *Altermanthera mexicana* (Schl.) Hieron.  
 2314. *Ranunculus flagelliformis* Sm.  
 2326.       "       "       "

- Pennell 2368. *Weinmannia tomentosa* L. f.  
 2378. *Valeriana crassifolia* H. B. K.  
 2398. *Thalictrum podocarpum* DC.  
 2401. *Hedyosmum scabrum* (R. & P.) Solms.  
 2441. *Clematis sericea* H. B. K.  
 2561. *Cardamine ovata* Benth.  
 2710. *Astrephia chaerophylloides* DC.  
 2719. *Arenaria lanuginosa* (Mx.) Rohrb.  
 2834. *Hemistylis velutina* Wedd.  
 2950. *Alchemilla aphanoides* Mutis.  
 2960. *Cardamine jamesonii* Hook.  
 2961. *Ranunculus praemorsus* DC.  
 2963. *Drimys winteri* Forst.  
 2972. *Alchemilla orbiculata* R. & P.  
 2976. *Cardamine flaccida* C. & S.  
 2982. *Acaena ovalifolia* R. & P.  
 2984. *Colignonia ovalifolia* Heimerl.  
 3016. *Alchemilla nivalis* H. B. K.  
 3025. " " "  
 3031. *Cerastium floccosum* Benth.  
 3032. *Draba cheiranthoides* Hook. f. ~~?~~  
 3034. *Cerastium glutinosum* H. B. K.  
 3035. *Draba pachythyrus* Tr. & Planch.  
 3049. *Valeriana plantaginea* H. B. K.  
 3050. *Valeriana plantaginea* H. B. K.  
 3052. *Cerastium willdenovii* H. B. K.  
 3054. *Ranunculus peruvianus* Pers.  
 3080. *Phrygilanthus corymbosus* (Dietr.) Eichl.  
 3118. *Cardamine ovata* Benth.  
 3169. *Alchemilla aphanoides* Mutis.  
 3196. *Passiflora parritae* (Mast.) Bailey.  
 3202. *Hedyosmum goudotianum* Solms.  
 3221. *Iresine celosia* L.  
 3244. *Drymaria gracilis* C. & S.  
 3637. *Hirtella paniculata* Sw.  
 3692. *Iresine celosia* L.  
 3717. *Helianthium tenellum* (Mart.) Britton.  
 3876. *Boerhaavia coccinea* Mill.  
 4200. *Iresine celosia* L.  
 4674. *Glinus radiatus* R. & P.  
 4705. *Altermanthera polygonoides* (L.) R. Br.

November 19, 1924.

Lace

PLANTS COLLECTED IN COLOMBIA BY F. W. PENNELL, 1917-1918  
(including Rusby & Pennell).

- 88. *Sida acuta* Burm.
- 93. *Cuscuta americana congesta*.
- 139. *Turnera ulmifolia* L.
- 209. " "
- 298. *Paullinia fuscescens*.
- 337. *Turnera ulmifolia* L.
- 392. *Phyllanthus diffusus* Kl.
- 400. *Psidium araca* Raddi.
- 436. *Myrcia xylopioides* (H. B. K.) DC.
- 476. *Melochia hirsuta* Cav.
- 494. *Pavonia mollis* H. B. K.
- 496. *Melochia venosa* Sw.
- 581. *Phyllanthus lathyroides* H. B. K.
- 766. *Bomarea setacea* (R. & P.) Herb.
- 771. *Juncus bogotensis* H. B. K.
- 1110. *Myrcia xylopioides* (H. B. K.) DC.
- 1139. *Chamaesyce densiflora* (Kl.).
- 1187. " *lasiocarpa* Kl.
- 1216. *Oenothera multicaulis tarquensis* (H. B. K.) Munz & Johnston.
- 1379. *Helicteres guazumaefolia* H. B. K.
- 1453. *Cuscuta corniculata* Engl. (Det. T. G. Yuncker)
- 1481. *Myrcia lanceolata* Camb. (Leaves broader but otherwise typical.)
- 1495. *Phyllanthus carolinensis* Walt.
- 1712. *Myrcia lanceolata* Camb.
- 1743. *Sclerothrix fasciculata* Presl.
- 1753. *Melochia lupulina* Sw.
- 1773. *Psidiopsis moritziana* Berg.
- 1794. *Melochia lupulina* Sw.
- 1800. *Sclerothrix fasciculata* Presl.
- 1809. *Polygala gracilis* H. B. K.
- 1811. *Bomarea ovata* (Cav.) Mirb.
- 1819. *Bomarea multiflora* (L. f.) Mirb.
- 1917. *Ugni myricoides* (H. B. K.) Berg.
- 1925. *Bomarea frondea* Mast.
- 1946. *Plagiocheilus bogotensis* (H. B. K.) Wedd.
- 1947. *Geranium hirtum* Willd.
- 1990. *Juncoides racemosum* (Desv.) Kuntze.
- 2032. *Bomarea caldasii* (H. B. K.) Aschers. & Graebn.
- 2049. *Juncus brunneus* Buchenau?
- 2058. *Geranium multiceps* Turcz.
- 2066. *Geranium cucullatum elongatum* Wedd.
- 2079. *Juncoides giganteum* (Desv.) Sheldon.
- 2133. *Juncus bogotensis* H. B. K.
- 2134. " *microcephalus* H. B. K.
- 2159. *Scutellaria racemosa* Pers.



2166. *Juncus imbricatus* LaHarpe.
2184. *Parosela mutisii* (H. B. K.).
2215.       "               "               "
2258. *Myrteola oxycoccoides* (Benth.) Berg.
2299. *Geranium hirtum* Willd.
2309. *Jussiaea repens* L.
2330. *Oenothera multicaulis tarquensis* (H. B. K.) Munz &  
          Johnston. (Det. Munz & Johnston)
2337. *Phyllanthus salviaefolius* H. B. K.
2430. *Vallea stipularis* Mutis.
2511. *Juncus densiflorus* H. B. K.
2512.       "       *microcephalus* H. B. K.
2557.       "       *bufonius* L.
2558.       "       *imbricatus* LaHarpe.
2592. *Bomarea hispida* Baker.
2660. *Gunnera pilosa* H. B. K.
2757. *Pavonia sidifolia* H. B. K.
2805.       "       *dasypetala* Turcz.
2899. *Chamaesyce hyssopifolia* (L.).
2915. *Cracca leptostachya* (DC.) Rusby.
2919. *Phyllanthus diffusus* Kl.
2935. *Crotalaria pterocaula* Desv.
2964. *Geranium columbianum* Knuth.
2969. *Juncus involucreatus* Steud.
2973. *Geranium columbianum* Knuth.
2981.       "       *hirtum* Willd.
3028. *Juncoides peruvianum* (Desv.) Kuntze?
3105.       "       *giganteum* (Desv.) Sheldon.
3187. *Bomarea multiflora* (L. f.) Mirb.
3223. *Acalypha macrostachya* Jacq.
3234. *Bomarea krauzlinii* Baker?
3249. *Melochia lupulina* Sw.
3305. *Phyllanthus lathyroides* H. B. K.
3322. *Loasa triphylla papaverifolia* (H. B. K.) Urb. & Gilg.
3345. *Sida glutinosa* Commers.
3382. *Phyllanthus lathyroides* H. B. K.
3459. *Melochia hirsuta* Cav.
3532. *Phyllanthus diffusus* Kl.
3533. *Chamaesyce hyssopifolia* (L.).
3609.       "       *densiflora* (Kl.).
3659. *Melochia hirsuta* Cav.
3661. *Turnera ulmifolia* L.
3746. *Acalypha diversifolia* Jacq.
3792. *Chamaesyce lasiocarpa* Kl.
3986. *Melochia nodiflora* Sw.
4060. *Parosela barbata* (Oerst.) Rydb.
4074. *Melochia lupulina* Sw.
4111. *Acalypha macrostachya* Jacq.
4124. *Teucrium palustre* H. B. K.
4180. *Acalypha diversifolia* Jacq.
4256. *Bomarea angustipetala* (Benth.) Baker.
4309.       "       *crassifolia* Baker.
4619. *Teucrium palustre* H. B. K.

Rusby-Pennell

Basleria

(det. C. V. Morton)

- 1367. *impressa* Morton
- 2417. *reticulata* var. *venosa* Morton
- 2665. *reticulata* Fritsch
- 2666.       "       var. *venosa* Morton
- 3400. *solanoides* H.B.K.
- 4382. *microphylla* var. *serrulata* Morton type

300. *Carica goudotiana* Planch. & Tr.  
 576. *Begonia holtonis* A. DC.  
 717. " *tovarensis* Kl.  
 1537. " *macra* A. DC.  
 1674. *Vismia rufescens* (Lam.) Pers.  
 1926. *Begonia urticae* L. f.  
 2440. " *ferruginea* L. f.  
 2543. " *tovarensis* Kl.  
 2653. *Begonia foliosa* H.B.K.  
 2925. *Ouratea magdalenae* (Tr. & Pl.) Engl.  
 2984. *Colignonia ovalifolia* Heimerl (*det. Standley*)  
 3284. *Begonia holtonis* A. DC.

V. COLLECTIONS OF RUSBY & PENNELL IN COLOMBIA, 1917-1918

- 437 *Miconia rufescens* (Aubl.) DC.  
 ✓399 " *albicans* (Sw.) Triana  
 694 " *theaezans* (Bonpl.) DC.  
 792 " *floribunda* Naud.  
 791 " *minuta* Gleason, n.sp.  
 818 " *floribunda* Naud.  
 813 " *aggregata* Gleason, n.sp.  
 1011 " *rufescens* (Aubl.) DC.  
 831 " *cuneifolia* Gleason, n.sp.  
 1080 " *stenostachya* (Schr. & Mart.) DC.  
 1088 " *albicans* (Sw.) Triana  
 11310 " *ligustrina* (Smith) Triana  
 1361 " *macrophylla* (D. Don) Triana  
 ✓1283 " *ligustrina* (Smith) Triana  
 1404 " *rufescens* (Aubl.) DC.  
 1511 " *minutiflora* (Bonpl.) DC.  
 1677 " *theaezans* (Bonpl.) DC.  
 ✓1971 " sp.  
 2094 " *ligustrina* (Smith) Triana  
 2121 " *cataractae* Triana  
 2172 " *reclinata* (Bonpl.) Naud.  
 ✓2211 " *ligustrina* (Smith) Triana  
 2418 " *stipularis* Naud.  
 ✓2739 " *spicellata* Bonpl.  
 ✓2851 " *albicans* (Sw.) Triana  
 ✓2852 " *acinodendrum* (L.) Triana  
 2894 " *stenostachya* (Schr. & Mart.) DC.  
 ✓3078 " *salicifolia* (Bonpl.) Naud.  
 ✓3152 " sp.  
 3441 " *barbinervis* (Benth.) Triana  
 ✓3525 " *albicans* (Sw.) Triana  
 4392 " sp.

Pennell 3487. *Bleparodon minimum* Woodson (type)

Pennell. 1587. *Mascagnia volubilis* (Sims) Ndz.

" 3560. *Hiraea ternifolia granatensis* <sup>aris</sup> ~~vulgaris~~ Ndz. *Det. C. J. Morton*

" 4033. *Mascagnia dumetorum* Morton (type)

Pennell-Colombia

3336. *Dioscorea flaccida* Knuth (type) *det. R. Knuth*



Xyris  
Rusby & Pennell - 1917  
775. X. columbiana Malme (but not typical)  
1409. X. lacerata Pohl  
2202. X. acutifolia (Heimerl) Malme

(Det. Malme)

RUSBY & PENNELL -- COLOMBIA

(Det. Standley)

391. Iresine argentata (Mart.) D. Dietr.  
1092. " " " "  
1659. Psaffia iresinoides (H.B.K.) Spreng.  
1828. " Dunalliana (Moq.) Standl.  
1886. Alternanthera elongata (Willd.) Standl.  
1957. " lanceolata (Benth.) Standl.  
2284. " porrigens (Jacq.) Kuntze?  
3879. Amaranthus dubius Mart.  
4668. " " "  
4705. Alternanthera polygovoidea (L.) R. Br.

Colombia, Rusby and Pennell, 1917--1918

- 480-A, 499-A Tibouchina ciliaris (Vent.) Cogn.  
500-A Aciotis paludosa (Mart.) Triana  
523-A Tibouchina longifolia (Vahl) Baill.  
568, 569 Monochaetum Bonplandii (Kunth) Naud.  
✓ 684 Monochaetum meridense Naud.  
723 Tibouchina lepidota (Bonpl.) Baill.  
736 Monochaetum meridense Naud.  
✓ 804 " villosum Gleason, n. sp.  
820 ~~849~~ " meridense Naud.  
✓ 943 " Bonplandii (Kunth) Naud.  
968 " "  
981 " "  
✓ 1051 Tibouchina gracilis (Bonpl.) Cogn.  
✓ 1123 Clidemia capitellata (Bonpl.) D. Don  
1423 Poteranthera minor Gleason, n. sp.  
1467 Siphanthra alsinoides Gleason, n. sp.  
1510 Clidemia cymosa Gleason, n. sp.  
18 49 Tibouchina ciliaris (Vent.) Cogn.  
✓ 2449 Monochaetum coronatum Gleason, n. sp.  
3332 Tibouchina ciliaris (Vent.) Cogn.  
✓ 3466 Clidemia capitellata (Bonpl.) D. Don  
✓ 3470 Meriania barbinervis Naud.  
4447 Tococa platyphylla Benth.  
4466 Blakea fasciculata Gleason, n. sp.  
4546 Triolena hirsuta Triana

- Pennell
- 1423. *Dichromena parvula* B. & K.
  - 1501. " " " "
  - 3216. " *polystachya* Purrrill
  - 12499. *Rhaphithamnus cyanocarpus* (Bert.) Miers (det. Moldenke)
  - ✓ 14440. *Cynanchum eurystephanum* Malme (type)

F. W. Pennell, Colombia

- 2019. *S. abirtimus* Willd.
- 2047. *S. chinogeton* Wedd. forma *macrocephalus* Hieron
- 2051. *S. subbruncinatus* (Wedd.) Greenman
- 2055. *S. stuebelii* Hieron
- 2971. *S. patens* (HBK.) DC.
- 2985. *S. sylvicolus* Greenman, sp. nov.
- 3002. *S. weddellianus* Hieron
- 3033. *S. latiflorus* Wedd.
- 3076. *S. andicola* Turcz

det. J. M. G.

### Hydrocotyle.

Det. Mildred E. Mathias, 1933.

Pennell-Colombia.

- 2799. *H. pusilla* A. Rich
- 3204. *H.* "
- 2624. *H. tenerrima* Rose (type)
- in P. & K. 6592. *H. Humboldtii* A. Rich
- in P. & K. 9202. *H.* "
- 2945. *H. hederacea* Mathias

Pennell (Rusby & Pennell). Colombia

- 1950. *Cestrum petiolare* H.B.K. (Det. Morton)
- 2349. " *mutisii* Willd. " "
- 3984. *Rhynchospora corymbosa* (L.) Britton
- 4153. *Tradescantia elongata* G.F.W. Mey.
- 4214. *Hybanthus prunifolius* (H.B.K.) Schultze
- 3522. *Cassaria silvestris* Sw. (Det. Sleumer)

Current South American Collections identified by H. Sleumer.

Reported by U. S. National Museum, March 1936.

Rusby & Pennell-Pennell

- ✓ 748. *Vaccinium meridionale* Sw.
- ✓ 749. " "
- 840. " *floribundum ramosissimum* (Dunal) Sleumer
- ✓ 2060. " " "
- 2598. " " H.B.K.
- ✓ 4262. " " *marginatum* (Dunal) Sleumer and *V. corymbodendron* Dunal



~~Julocroton hons~~

171. *Julocroton hondensis* (Karst.) Muell. Arg.  
511. *Siparuna sessiliflora* (H. B. K.) DC. (Det. A. C. Smith)  
970. *Inga corucans* Willd.?  
1420. *Eriosema simplicifolium* (~~author?~~) *cf. Don*  
1850. *Mucuna sloanei* Fawc. & Rendle (correction)  
3936. *Pithecolobium lanceolatum* (H. & B.) Benth.  
4159. *Inga vera* Willd.  
4792. *Priva lappulacea* (L.) Pers.

9  
um, September 1933.

2538. *Cyperus aschenbornianus* Boeck. (correction)  
3032. *Draba pennell-hazenii* O. E. Schulz (det. O. E. Schulz)  
3165. *Juanullosa speciosa* (Miers) Dun.  
3295. *Costus sanguinens* Donn. Sm. (det. Rowlee in N. Y. B. G.)  
3304. " *nutans* K. Sch. " " " "  
3437. *Albizzia carbonaria* Britton (det. Britton)  
3633. *Scleria latilacunosa* Kukenth. (det. Core)  
4203. *Cyperus chalaranthus* Presl (correction)  
4009. *Chamaecrista schlimii* (Benth.) B. & R.  
4653. *Cyperus chalaranthus* Presl (correction)  
4698. *Brownea stenantha* Britton & Killip (type)

Rusby & Pennell, Colombia

- 905, 2665. *B. caleria* reticulata Fritsch  
1367. *B. leucostoma* (Hook.) Hanst.  
2666, 2417. *B. nitens* Fritsch  
3400. *B. acutifolia* Benth.  
4382. *B. microphylla* Fritsch

Rusby & Pennell, Colombia.

Malpighiaceae determined by C. V. Morton; others by E. P. Killip  
unless otherwise noted.

U. S. National Museum, December 1934.

- 134, 3617, 2813. *Galactia velutina* Benth.  
222. *Bunchosia glauca* H.B.K.  
319. *Banisteriopsis cornifolia* (H.B.K.) C. B. Rob.  
338. *Tetrapteris huilensis* Morton (type)  
640, 834, 999. *Clusia multiflora* H.B.K. (Det. A. C. Smith)  
891. *Aphelandra acanthus* Nees (det. Leonard)  
1136. *Banisteria suberosa candolleana* (Juss.) Morton  
1141. " *purpurea puberula* (Ndz.) Morton  
1390. *Mandevilla subsagittata* (R. & P.) Woods. (Det. Woodson)  
1403. *Vismia lauriformis* (Lam.) Choisy (Det. A. C. Smith)  
1420. *Eriosema simplicifolium* (H.B.K.) Walp.  
1512. *Tetrapteris calophylla* Juss.  
1642. *Phaseolus linearis* H.B.K.  
1840. *Galactia velutina* Benth.  
1879. *Cologania ovalifolia* H.B.K.  
2470. " " "  
2743. *Galactia velutina* Benth. (form)  
2820, 2838. *Banisteriopsis cornifolia* (H.B.K.) C. B. Rob.  
2829. *Dioclea paniculata* Killip  
2874. *Heliconia robusta* Pax (Det. Griggs)  
2929. *Banisteriopsis cornifolia* (H.B.K.) C. B. Rob.  
3243. *Calopogonium galactioides* (H.B.K.) Benth.  
3427. *Oryctanthus ruficaulis* (P. & E.) Eichl. (Det. A. C. Smith)  
3438. *Mesechites brevipes* (Benth.) Muell. Arg. (Det. Woodson)  
3513. *Galactia velutina* Benth.  
3610. *Machaerium tolimense* Killip (type)  
3962. *Sesbania exasperata* H.B.K.  
3966. *Triplaris pyramidalis* Jacq.  
3971. *Bunchosia rhombifolia* Turcz.  
3979. *Machaerium attenuatum* Killip (type)  
4080. *Dioclea guianensis* Benth.  
4161. *Rhynchosia calycosa* Hemsl.  
4242. *Chaetocalyx retusa* Blake (not *C. latisiliqua*)  
4255. *Carex conferto-spicata* Boeckl. (Det. Mackenzie)  
4373. *Clusia multiflora* H.B.K. (Det. A. C. Smitn)

Rusby & Pennell, Colombia

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2929. *Banisteriopsis cornifolia* (H.B.K.) C. B. Rob.  
3243. *Calopogonium galactioides* (H.B.K.) Benth.  
3427. *Oryctanthus ruficaulis* (P. & E.) Eichl. (Det. A. C. Smith)  
3438. *Mesechites brevipes* (Benth.) Muell. Arg. (Det. Woodson)  
3513. *Galactia velutina* Benth.  
3610. *Machaerium tolimense* Killip (type)  
3962. *Sesbania exasperata* H.B.K.  
3966. *Triplaris pyramidalis* Jacq.  
3971. *Bunchosia rhombifolia* Turcz.  
3979. *Machaerium attenuatum* Killip (type)  
4080. *Dioclea guianensis* Benth.  
4161. *Rhynchosia calycosa* Hemsl.  
4242. *Chaetocalyx retusa* Blake (not *C. latisiliqua*)  
4255. *Carex conferto-spicata* Boeckl. (Det. Mackenzie)  
4373. *Clusia multiflora* H.B.K. (Det. A. C. Smith)



(Det. Miss C. K. Allen, Missouri Botanical Garden).

Rusby & Pennell.

2434. *H. brevicornis* (H. B. K.) Don

2438. *H. major* Wedd.

3001. *H. dasyantha* Gilg

4268. *H. foliosa* Gilg

Determination of current South American collections

Rusby & Pennell.

827. *Disterigma elassanthum* Blake. Type.

2411. *Loasa campanuliflora* Tr. & Planch.

MALPIGHIACEAE. DET. C. V. MORTON.

Rusby & Pennell 103. *Mascagnia violacea* (Tr. & Pl.) Ndz. (ex char.)

" " " 338. *Tetrapteryx huilensis* Morton (type)

Pennell

1202. *H. suaveolens* Poit.

3585. *H. " "*

3891. *H. pectinata* (L.) Poit.

*Heptia*  
det. S. King

-Rusby & Pennell 4437 *Miconia desmantha* Benth.

Rusby & Pennell 4404 Unidentifiable, possibly *Leandra*

" " 817 " " "

Rusby & Pennell, and Pennell 1917

*Rubus*  
837. *R. glaucus* Benth.

708. *R. porphyromallus* Focke

884. Cf. *R. guayanensis* Focke

912. *R. guayanensis* (aff.) Focke

1843. *R. boliviensis* Focke

1969. *R. glaucus* Benth.

3129. *R. glaucus* Benth.

3326. *R. urticaefolius* Poir.

TT

Rusby & Pennell & Pennell, 1917

586. *O. scandens* H.B.K.

764. *O. lotoides* H.B.K.

1593. *O. barrelieri* L.

2571. *O. pubescens* H.B.K.

2939. *O. lotoides* H.B.K.

3096. *O. tolimensis* R. Knuth, TYPE

3113. *O. scandens* H.B.K.

3312. *O. hedyaroides* H.B.K.

Rec'd. June, 1932

Det. by O. S. Eitelman & others

Colombia:

Rusby & Pennell (or Pennell):

16. *Cissus erosa* L.C. Rich.  
40. " " "  
59. *Chelonanthus acutangulus* (R. & P.) Gilg  
178. *Corearia mariquitensis* HBK. (comp. type at P.)  
224. *Ficus elliptica* HBK. (comp. type at P.)  
266. *Trichilia cuneata* Radlk. (det. Harms)  
275. *Trichilia* aff. *peruviana* C.DC. (det. Harms)  
280. *Aristolochia ringens* Vahl  
288. *Gouania tomentosa* Jacq.  
292. *Sissis sicyoides* L.  
299. " "  
323. *Phthirusa theobromae* (Willd.) Eichl.  
326. *Waltheria americana* L.  
371. *Ficus elliptica* HBK.  
440. *Chelonanthus acutangulus* (R. & P.) Gilg.  
445. *Melochia mollis* (HBK.) Tr. & Pl. (comp. type at P.)  
542. *Gaultheria erecta* Vent.  
564. *Gaultheria anastomosans* HBK.  
655. *Smilax Ruiziana* Kunth  
672. *Styrax macrocalyx* Perk.  
678. *Symbolanthus latifolius* Gilg  
720. *Siparuna macrophylla* (HBK.) A.DC.  
748. *Vaccinium caracasenum* HBK.  
749. " "  
753. *Rhamnus Goudotianus* Tr. & Pl.  
802. *Hedyosmum Goudotianum* Solms, not *H. scabrum*  
806. *Nectandra globosa* (Aubl.) Mez  
821. *Smilax cumanensis* H. & B.  
828. *Gaultheria anastomosans* HBK.  
840. *Vaccinium caracasenum* HBK.  
841. " "  
885. *Cissus rhombifolia* Vahl  
922. *Siparuna macrophylla* (HBK.) A.DC. (comp. type at P.)  
961. *Clethra repanda* Turcz.  
967. *Gaultheria anastomosans* HBK.  
984. *Sisyrinchium iridifolium* HBK. (comp. type at P.)  
996. *Gaultheria erecta* Vent. (comp. type at B.)  
1068. *Burmannia capitata* (Michx.) Mart.  
1149. *Bursera tomentosa* (Jacq.) Tr. & Pl.  
1258. *Gaylussacia buxifolia* HBK.  
1304. *Orthrosanthus chimboracensis* (HBK.) Baker  
1311. *Pernettya myrsinoides* (HBK.) Zucc.  
1312. " "  
1313. *Gaultheria cordifolia* HBK.  
1314. *Gaultheria anastomosans* HBK.  
1315. " "  
1316. " "  
1316A. " "  
1324. *Sisyrinchium convolutum* Nees  
1348A. *Sisyrinchium alatum* Hook.  
1383. *Cissampelos pareira* L. v *typica* Diels  
1416. *Burmannia flava* Mart.  
1418. *Chelonanthus bifidus* (HBK.) Gilg (comp. type at B.)







## Rusby &amp; Pennell (cont.):

3635. *Cecropia Goudotiana* Trec. (comp. type at P.)  
 3641. *Cipura paludosa* Aubl.  
 3671. " "  
 3722. *Souroubea guianensis* Aubl.  
 3781. *Ficus glabrata* HBK.  
 3830. *Triplaris caracasana* Cham.  
 3832. *Herrania albiflora* Goud.  
 3915. *Casearia spinosa* Willd.  
 3942. *Bombax mompoxense* HBK. (comp. type at P.)  
 3985. *Triplaris Cumingiana* Fisch. & Mey.  
 3976. *Lafoensia puniceifolia* DC.  
 4090. *Lecythis elliptica* HBK.  
 4116. *Helicteres guazumaefolia* HBK.  
 4123. *Struthanthus orbicularis* (HBK.) Blume  
 4142. " "  
 4208. *Herrania albiflora* Goud.  
 4250. *Pernettya myrsinoides* (HBK.) Zucc.  
 4253. *Sisyrinchium pusillum* HBK.  
 4262. *Vaccinium densiflorum* Benth.  
 4267. *Disterigma empetrifolium* (HBK.) Nied.  
 4280. *Gaylussacia buxifolia* HBK.  
 4306. *Gaultheria cordifolia* HBK.  
 4354. *Cavendishia sophoclesioides* A.C.Smith (type)  
 4371. *Ternstroemia meridionalis* Mutis (comp. type at P.)  
 4431. *Disterigma cuspidatum* (Planch.) Nied.  
 4548. *Gustavia pleurocarpa* Pittier (comp. type coll.) (new to S.A.)  
 4575. *Clusia Cooperi* Standl. (comp. type coll.) (new to S.A.)  
 4576. " " "  
 4585. *Aristolochia pilosa* HBK. (!O.C.Schmidt)  
 4593. *Ficus glabrata* HBK. (comp. type at P.)  
 4703. *Struthanthus orbicularis* (HBK.) Blume (comp. type at P.)  
 4747. *Aristolochia loriflora* Masters (det. O.C.Schmidt)

4437. *Miconia desmantha* Benth. (det. Gleason)

## Colombia.

## Rusby &amp; Pennell:

377. *Phthirusa tortuosa* A.C.Smith (type)  
 583. *Siparuna huilensis* A.C.Smith  
 837. *Phthirusa pyrifolia* (HBK.) Eichl?  
 869. *Siparuna huilensis* A.C.Smith (type)  
 870. " " "  
 1662. *Aegiphila integrifolia* (Jacq.) Jacks. (det. Moldenke)  
 2060. *Vaccinium floribundum* HBK.  
 2664. *Themistoclesia rostrata* A.C.Smith (type)  
 3199. *Struthanthus leptostachyus* (HBK.) G. Don. vel valde aff.  
 3519. *Callicarpa acuminata* HBK. (det. Moldenke)  
 3629. " " "  
 3902. *Psittacanthus Warmingii* Eichl.  
 4288. *Vaccinium Pennellii* A.C.Smith  
 4316. " " "  
 4341. *Gaultheria Pennellii* A.C.Smith (type)  
 4354. *Cavendishia sophoclesioides* A.C.Smith (type)

MISCELLANEOUS

Gleason 785. *Ficus gleasonii* Standl.

841. " *olmediaefolia* Standl.

De la Cruz 1167. *Trema micrantha* (L.) Blume

1558. *Ficus gleasonii* Standl.

2359. " " "

2396. " " "

2639. " " "

2870. " " "

4496. *Solanum surinamense* Steud

Broadway (Venezuela) 736. *Coleosanthus diffusus* (Vahl) Ktze. (Det. Blake)

Broadway 848. *Parahancornia amapa* (Hub.) Ducke

Pachano 47. *Hydrocotyle bonplandii* Rich.

81. *Geranium mexicanum* H.B.K.

94. *Tagetes crassiceps* Blake (Det. Blake)

105. *Winthostachys mollis* (H.B.K.) Epl. (Det. Epling)

189. *Neonelsonia acuminata* (Benth.) C. & R.

Pennell (Colombia)

2262. *Ribes andicola* Janecz. (C Compared with type at Geneva)

2431. *Dendrophthora squamigera* Benth. (Compared with type at Kew)

3446. *Vismia dealbata* H.B.K. (C Compared with type at Paris)

Rusby (Bolivia)

746. *O. pseudo-violacea* R. Knuth, TYPE

755. *O. medicaginea* H.B.K.

758. *O. buchtienii* (Rusby) R. Knuth

Rusby (Bolivia)

468. *R. boliviensis* Focke (rather than *R. sellowii*)

474. Aff. *R. guayanensis* Focke (not *R. bogotensis*)

476. *R. buchtienii* Focke

Rusby & Pennell 778 sp.nov. unnamed. Distr. as *Centropogon* sp. ✓

Burmeistera 997 sp.nov. unnamed. Distr. as *Siphocampylus* sp.

Rusby (Bolivia)

960. *Nephromeria axillaris acutifoliola* (Kuntze) Schindl.

961. *Desmodium affine* Schlecht.

964. *Meibomia limensis* (Hook.) Kuntze

976. " *scorpiurus* (Sw.) Kuntze

Rusby 637 *sparsipilus* Wim. Distr. as (?) *dubius* Zahlbr. *Siphocampylus*

Rusby & Pennell 947 *venosus* Gl. var. *neivanus* Wim. *Siphocampylus*

Rusby

2040. *Weinmannia trollei* O. C. Schmidt

Reported by N.Y. Bot. Gard. June 1938.

Det. Suessenguth:

Rusby & Pennell 97. *Iresine elatior* Rich.

160. *Alternanthera halimifolia* Standley var.

3827. *Chamissoa altissima* HBK.

3858. *Alternanthera polygonoides* R. Br. sens. lat.

4050. *Iresine elatior* Rich.



Mulford Biol. Expl.

2057. *A. pterocarpa* O. C. Schmidt

1162. *A. pilosa* H. B. K.

1776. " "

1857. " "

145. " *boliviensis* Kuntze

601. " "

502. " "

1164. " *odoratissima* L.

*Aristolochia*



Eupatoriums and eupatorioid Compositae collected in Bolivia by the  
Mulford Expedition. By H. H. Rusby - 1921.

Recd. at Gray Herb. about June 1st, 1922. Determined by B. L. Robinson.

- 68 *Ageratum conyzoides* L.  
96 *Eupatorium scopulorum* Wedd.  
105 *Ophryosporus piquerioides* (DC.) Benth. & Hook. f.  
120 *Stevia*  
153 *Ophryosporus Cumingii* (Sch.-Bip.) Benth. & Hook. f.  
168 *Stevia*  
185 *Eupatorium Sternbergianum* DC.  
267 *Stevia*  
304 *Vernonia*  
376 *Eupatorium macrophyllum* L.  
424 *Ophryosporus piquerioides* (DC.) Benth. & Hook. f.  
626 *Mikania Haenkeana* DC.  
677 *Ageratum conyzoides* L.  
689 *Eupatorium laevigatum* Lam.  
918 *Ageratum conyzoides* L.  
919 *Ageratum conyzoides* L.  
1317 *Eupatorium kleinioides* HBK.  
1350 " *ivaefolium* L.  
1353 *Mikania officinalis* Mart.  
1426 *Eupatorium ivaefolium* L.  
1485 " *hecatanthum* (DC.) Bak.  
1685 " *ivaefolium* L.  
1713 " *kleinioides* HBK. (n.d.)  
1983 *Mikania psilostachya* DC.  
2145 " *rubella* Lingelsheim.  
2146 *Ageratum conyzoides* L.  
2147 *Eupatorium morifolium* HBK. (n.d.)

Flora of Arizona

Interesting localities, Rusby's collection of 1883.

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- 506 *Ranunculus cordiophyllus*, Hook, Harts Rancho  
 513 *Arabis perfoliata*, Lam Prescott.  
 514 *Streptanthus cordatus*, Nutt. Yampai.  
 515 *Draba asprella*, E. L. S. n. sp. Lynx Creek.  
 516 " *Carolina*, var *micrantha*, Near Prescott.  
 522 *Wisligeria refracta*, Eng. Holbrook.  
 524 *Krameria parvifolia*, Benth., banks of Col-  
 orado at mouth of Diamond Creek.  
 525 *Polygala Rusbyi*, E. L. S. n. sp. Banghart's  
 Rancho, and Yampai.  
 526 " *scoparia*, HBK. Oak Creek.  
 528 *Silene acaulis*, L. summit of Mt. Humphreys  
 530 } *Arenaria scabrella*, E. L. S. n. sp. "  
 531 } "  
 532 " *Rusbyi* " " " " " Throughout the  
 Juniper forests of Navajo Co.  
 537 *Sphaeralcea pendleri*, Gray Prescott.  
 539 *Abutilon parvulum*, Banghart Rancho  
 540 *Linum Nev.-Mexicanum*, Throughout  
 San Francisco Forest.  
 542 *Larrea Mex.*, Moir, A very small-leaved  
 and very glandular form on  
 bank of Colorado Riv. at mouth of  
 Diamond Creek.  
 543 *Geranium cespitosum*, James Flagstaff  
 545 *Oxalis decaphylla*, <sup>HBK.</sup> Mt. Humphreys  
 549 *Zizyphus obtusifolius*, Eng. Near Peach Springs  
 553 *Lupinus concinnus* Gray Lynx Creek.  
 557 *Trifolium Kingii*, Wats. Bill Williams Mt.  
 561 *Hosackia Wrightii*, Eng. Flagstaff.  
 564 *Dalea Wrightii*, Gray Beaver Head.  
 567 *Robinia Nev.-Mexicana*, Gray at Hells canon



a var with nearly white flowers and  
cordate leaflets.

- 5-68 *Astragalus Pattersonii*, Eng, Casimiro  
5-72 " *Brandegei*, Baughart Rancho  
5-73 " *Rushii*, E. L. & n. sp. Mt. Agassiz.  
5-75- " *Matthewsii*, Mt. One specimen  
at Williams

~~5-84 *Prunus demissa* (?) specimen sent  
Haworth.~~

- 5-89 *Senecio triflorus*, Pursh. Very abundant on  
Bill Williams Mt.  
5-90 " *Rossii*, Sizing, Mt. Humphreys.  
5-91 *Potentilla subviscosa*, E. L. & Hapstoft.  
5-96 *Dioscorea depauperata*, Eng, <sup>Near</sup> Head of  
Oak Creek.  
5-99 *Ribes Rushii*, E. L. & n. sp. San Francisco Mt.,  
& Bill Williams Mt.  
601 *Scorodanthum rhodanthum*, Eng Mt. Humphreys  
602 *Lythrum alatum*, Pursh. var. *linearifolium*  
Eng, Peach Springs.  
604 *Oenothera chamaenerioides*, Eng & Clifton  
& Lynx Creek  
612 *Mentzelia Wrightii*, Eng Beaver Bend,  
613 " *multiflora*, " Near Prescott  
614 " n. sp. Bellemont  
617 *Mammillaria vivipara*, Hawt  
*forma sphacacantha* Eng,  
Hapstoft.  
620 *Cereus stramineus* Eng, Beaver Head.  
621 *Opuntia Bigelovii* " Near Peach Springs

- 622 *Opuntia acanthocarpa* Eng & Big, Peach  
Springs & adjacent country.  
633 " *Whipplei* Eng & Big. Navajo  
Springs & Prescott.  
624 " *Chlorotica* sparingly throughout  
southern part of Yavapai Co.  
(Not collected) *Opuntia basilaris*, Hackberry.  
638 *Lonicera involucrata*, Barlow, Mt. Humphreys  
640 *Salix Wrightii*, Eng, about Prescott.  
642 " *microphyllum*, " Baughart Rancho  
643 *Valeriana dioica*, L., Bill Williams Mt.  
647 *Hymenocallis Wislizeni*, Eng, Peach Springs.  
65-0 *Tetradymia glabrata*, Casimiro.  
65-1 *Bigelovia Rushii*, E. L. & n. sp. Holbrook  
65-1 1/2 " *spatulata*, Prescott.  
65-3 *Helianthus Maximilianae*, Schrad, South  
of Hapstoft.  
65-4 *Lygodesmia spinosa*, Hapstoft.  
65-7 *Riddellia Tagetina*, Johnsons Canon.  
65-8 *Taraxacum dens-leonis* Prescott.  
65-9 *Dicoria Brandegei*, Holbrook.  
660 *Townsendia Arizonica*, Holbrook &  
Ash Fork.  
661 *Coreopsis Drummondii*, Oak Creek.  
663 *Malacothrix Rushii*, E. L. & n. sp. Baugh-  
art Rancho.  
665 *Senecio aureus*, L., var *crispus*, Rusby.,  
Lynx Creek.  
669 " ~~ase~~ *sp. Arizonicus*, E. L. & n. sp.  
Lynx Creek.



- 670 *Senecio Franciscanus*, E. L. & n. sp.  
Flagstaff.
- 671 " *Actinella*, E. L. & n. sp. Flagstaff.
- 672 " *Aster Mexicana*, Gray, Oak Creek.
- 673 *Actinella Bigelovii*, Gray, Flagstaff & n.
- 674 " *scaposa* Nutt. Yampai
- 675 " *biennis* Oak Creek & Beaver Head
- 676 *Eucelia frutescens*, Hooker
- 676  $\frac{1}{2}$  " *Rusbyi*, E. L. & n. sp. Oak Creek
- 677 *Baccharis Wrightii*, Gray, Prescott
- 678 " *brachyphylla*, Yavapai Co.
- 680 *Manisuris Hookeriana*, Near Casimiro.
- 681 *Lactuca pulchella* DC. Mt. Agassiz.
- 682 *Oxytaenia acerosa*, Halbrook.
- 683 *Sol. multiradiata*, var. *seropulorum* Gray  
Mt. Humphreys.
- 684 " *nana*, Near Flagstaff.
- 685 *Aster tanacetifolius*, Ash Fork.
- 686 " *canescens*, Throughout.
- 687 " *paniculatus*, Albuquerque, N.M.
- 688 " *ericifolius* Throughout.
- 689 " *foliaceus*, var. *Burkei*, Harts Ranch.
- 690 " *spinosus*, Albuquerque, N.M.
- 691 *Eriogon subdecurrens*, Mt. Agassiz.
- 691  $\frac{1}{2}$  " *flagellaris*, Bill Williams Mts.
- 692 *Hymenopappus luteus*, D. Francis Forest.
- 693 " *tennifolius* " " "
- 694 *Perezia Wrightii*, common
- 697 *Encaphalium strictum* Mt. Agassiz
- 700 *Artemisia Bigelovii*, Lemmon & C.

- 702 *Dysodia Cooperi*, Gray, Hackberry.  
 703 *Lepachys taylori* Albuquerque, New  
 704 " *columnaris*, Santa Fe, "  
 705- *Bahia oppositifolia*, L & S, Albuquerque "  
 706 *Schubertia Hapshikia*, Cubero, N. M.  
 707 *Cnicus undulatus*, Baugharts Rancho  
 708 " *arizonicus* Oak Creek  
 709 " *ochrocentrus*, Near Beech Springs  
 710 " *Drummondii*, Var? Harts Rancho  
 713 *Lobelia splendens*, Oak Creek  
 714 *Campanula Schenckzeri*, Clarke Valley  
 718 *Manodora scoparia*, Beech Springs  
 722 *Acerates auriculata*, Prescott &c  
 723 *Gentiana Thuberi*, Haysloft  
 724 *Erythraea calycosa*, var. *arizonica*  
 Beech Springs.  
 725- *Prosera paniculata*, Oak ~~Creek~~  
 728 *Silene linearis*, very stout and  
 branching at Munro's Rancho  
*Silene Rusbyi*, throughout forest region,  
 and like all the other *Silenes* var-  
 iable as to length of corolla  
 tube, foliage very variable.  
 731 " *divaricata*, ~~Oak Park~~  
 733 " *rigida*, near var *acerosa*, Halbrook  
 733½ " *humilis*, with a hard woody  
 perennial root, Halbrook  
 734 " *tenniflora*, Benth, Lynx Creek.  
 735 *Phlox longifolia* var. *brimfolia* } Oak Park  
 736 " " " *Stansburyi* } &c



737 *Phlox speciosa*, var. *Woodhousei*  
Williams

739 *Phacelia bipida*, north of Prescott

740 " *malle*, E. L. & n. sp. " " "

741 " *Rushyi* " " " " "

742 " *Dremonia*, Gumpai,

743 " *arizonica* north of Prescott,

744 *Eriodictyon angustifolium*, Oak Creek  
(I think this species is not distinct  
from *E. glutinosum*)

745 *Eritrichium micranthum*, var. *Prescottii*.

746 *Echinopspermum pinetorum*, E. L. & Casimiro.  
& Mogollon Mts., N. M.

748 *Eritrichium setosissimum* Williams  
Knapstiff.

750 " *barbigerum*, Casimiro.

751 " (specimen sent - herewith)  
Ash Fork.

75-2 *Lithospermum cobrense*, E. L. & Williams

75-2  $\frac{1}{2}$  *Convolvulus incanus*, Beaver Creek

75-4 *Solanum Xanthi*, Gray, Oak Creek

75-5 *Physalis Wendleri*, Gray Casimiro.

75-9 *Castilleja minor* Oak Creek

767 *Pedicularis Parryi*, M. Humphreys

772 *Pentstemon Palmeri*, a dwarf form  
at Peach Springs.

773 " *Rushyi*, E. L. & n. sp. Baughart  
Rancho, and Gumpai.

775- " *vigatus* Knapstiff.

780 *Verberna polystachya*, near Knapstiff.

781 *Aphyllon multiflorum* Casimiro.

786 *Hedeoma procumbens*, E. L. & n. sp. Knapstiff.

787 " *thyrsoides*, Oak Creek

788 " " var. *oblongifolia*  
Gumpai, Co.

805- *Cladanthus suffruticosus*, Colorado River

806 *Eriogonum deflexum*, Hackberry

807 " *divaricatum*, Lemmon

808 " *corymbosum*, Casimiro.

809 " *Rushyi*, E. L. & n. sp. near Casimiro

810 " *vinum* Lynx Creek

811 " *Palmeri*, Hackberry.

812 " *ceruinum* Knapstiff.

813  $\frac{1}{2}$  " *rotundifolium*, Mojave, N. M.

816 " *blavum* Casimiro.

~~816~~ 817 " *inflatum* Peach Springs

818 " *racemosum* Knapstiff.

821 *Euphorbia dictyospermum* } near Mt. Verde.

822 " *strictospora* }

823 " *Wendleri* Everywhere

824 " *setiloba*, Hackberry

827 " *zygophylloides* "

831 *Pinus flexilis* } M. Humphreys.

832 " *aristatus* }

833- *Agave Mahensis*, Peach Springs.

836 *Smilacina sessilifolia*, Williams M.

842  $\frac{1}{2}$  *gigadeus Spauldingi*, Rushy  
Base of M. Humphreys.

# PLANTS OF NEW MEXICO AND ARIZONA.

— — — — —

The following is a partial list of my specimens. The Juncaceæ, Cyperaceæ and Gramineæ are still undetermined, and three boxes of other plants are yet to arrive. A supplement will be published later, giving the additional species, and naming those species marked doubtful in this list, which has been hastily prepared.

The price of specimens is \$8 per hundred, no selection being allowed beyond the selection of entire Orders. When any further selection is made, \$10 per hundred will be charged. When the full set is taken only \$5 per hundred will be charged. H. H. RUSBY, Franklin, N. J.

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>1 Clematis ligusticifolia, Nutt. (Fruit.)</li> <li>2 " Bigelovii, Torr.</li> <li>3 Thalictrum Fendleri, Eng.</li> <li>4 Anemone decapetala, L.</li> <li>5 Delphinium azureum, Mx.?</li> <li>6 Aconitum Fischeri, Reich.</li> <li>7 Argemone hispida, Gray?</li> <li>* 8 Eschscholtzia Californica, Cham., var.</li> <li>9 Corydalis aurea, Willd., var. occident-<br/>alis, Gray.</li> <li>10 Arabis Holboellii, Hornem.</li> <li>11 " var. patula.</li> <li>12 Dryopetalon runcinatum, Gray.</li> <li>13 Streptanthus carinatus, Wright.</li> <li>14 Vesicaria Gordoni, Gray.</li> <li>15 " purpurea, Gray.</li> <li>16 " stenophylla, Gray.</li> <li>17 Draba cuneifolia, Nutt.</li> <li>18 " streptocarpa, Gray.</li> <li>19 Sisymbrium diffusum, Gray.</li> <li>20 " canescens, Nutt.</li> <li>21 " sp.</li> <li>22 "</li> <li>23 Erysimum asperum, DC.</li> <li>24 Thelypodium integrifolium, Endl.</li> <li>25 " linearifolium, Watson.</li> <li>26 " Wrightii, Gray.</li> <li>27 Lepidium intermedium, Gray. (Petaled<br/>form.)</li> <li>* 28 Thlaspi alpestre, L., var. purpurea.</li> <li>29 Polanisia uniglandulosa, DC.</li> <li>30 Viola Canadensis, L.</li> <li>31 Polygala puberula, Gray.</li> <li>32 Monnina Wrightii, Gray.</li> <li>33 Krameria secundiflora, DC.</li> <li>34 Silene Greggii, Gray.</li> <li>35 Lychnis Drummondii, Watson.</li> <li>36 Cerastium nutans, Raf., var.</li> <li>37 Stellaria Jamesii, Torr.</li> <li>38 Arenaria saxosa, Gray.</li> <li>39 " var.?</li> <li>40 Drymaria sperguloides, Gray.</li> <li>41 " tenuella, Gray.</li> <li>* 42 " <i>caudata</i></li> <li>43 Talium aurantiacum, Engelm.</li> <li>44 " confertiflorum, E. L. Greene.</li> <li>* 45 Claytonia perfoliata, Donn.</li> <li>46 Sidalcea malvaeflora, Gray.</li> <li>47 " n. sp.?</li> <li>48 Malvastrum coccineum, Gray, var.</li> <li>49 "</li> </ul> | <ul style="list-style-type: none"> <li>50 Malvastrum leptophyllum, Gray.</li> <li>51 " hastatum, Gray.</li> <li>52 Anoda hastata, Cav.</li> <li>53 Linum Neo-Mexicanum, E. L. Greene.</li> <li>54 " aristatum, Engelm.</li> <li>* 55 " n. sp.?</li> <li>56 Tribulus grandiflorus, B. &amp; H.</li> <li>57 " maximus, L.</li> <li>58 Geranium Fremonti, Torr.</li> <li>59 " Richardsoni, Fisch. &amp; Mey.</li> <li>60 Ptelea angustifolia, Benth.</li> <li>* 61 Pachystima Myrsinites, Raf.</li> <li>* 62 Rhamnus <i>sp. Californica, var. tenuis</i></li> <li>63 "</li> <li>64 Ceanothus Fendleri, Gray.</li> <li>65 " Greggii, Gray.</li> <li>66 Vitis Arizonica, Engelm.</li> <li>67 Sapindus marginatus, Willd.</li> <li>68 Negundo aceroides, Moench.</li> <li>* 69 Acer grandidentatum, Nutt. (Fruit.)</li> <li>70 Rhus microphylla, Gray. (Fruit.)</li> <li>* 71 " trilobata, Nutt., var. <i>arundinacea, var. tenuis</i></li> <li>72 "</li> <li>73 Crotalaria lupulina, Raf.</li> <li>74 Lupinus argenteus, Pursh.</li> <li>75 " pusillus, Pursh?</li> <li>76 " Sitgreavesii, Watson.</li> <li>* 77 Hosackia Wrightii, Gray? (or a sp.) <i>rigida</i></li> <li>78 Psoralea floribunda, Nutt.</li> <li>79 Dalea albiflora, Gray? (May be new.)</li> <li>80 " alopecuroides, Willd.</li> <li>81 " formosa, Torr.</li> <li>82 " filiformis, Gray.</li> <li>83 " Jamesii, T. &amp; G.</li> <li>84 " polygonoides, Gray.</li> <li>85 " Wislizeni, Gray.</li> <li>86 Petalostemon exilis, Gray.</li> <li>87 " tenuifolius, Gray.</li> <li>88 Robinia Neo-Mexicana, Gray.</li> <li>* 89 " (With hispid fruit.)</li> <li>* 90 Astragalus Arizonicus, Gray. <i>A. amphioxys</i></li> <li>91 " Cobrensis, Gray.</li> <li>92 " Missouriensis, Nutt.</li> <li>93 " Nuttallianus, DC.</li> <li>94 " triflorus, Gray.</li> <li>95 Glycyrrhiza lepidota, Pursh.</li> <li>96 Desmodium Neo-Mexicanum, Gray.</li> <li>97 " sp. <i>Muhlenbergii</i></li> <li>98 Vicia exigua, Nutt.</li> <li>99 " leucophaea, E. L. Greene.</li> <li>100 " pulchella, HBK.</li> </ul> |
|--|---|

None more a S. W. Greene  
may be this



- 101 *Vicia Americana*, Muhl.  
 \* 102 " var. *linearis*, Watson.  
 103 *Lathyrus paluster*, L., var.  
 104  
 105 *Cologania longifolia*, Gray.  
 106 *Phaseolus macropoides*, Gray.  
 107 " *retusus*, Benth.  
 108 " *Wrightii*, Gray.  
 109 *Sophora sericea*, Nutt.  
 110 *Hoffmanseggia Jamesii*, T. & G.  
 111 " *stricta*, Benth.  
 112 *Cassia baubinioides*, Gray.  
 113 *Prosopis juliflora*, DC. (Fruit.)  
 \* 113a *Mimosa dysocarpa*, Benth.  
 114 " *pubescens*, Benth.  
 115 *Acacia constricta*, Benth.  
 116 " *filicina*, Willd.  
 117 " *sp.*?  
 ? \* 118 *Calliandra conferta*, Benth.  
 119 *Prunus Andersoni*, Gray.  
 120 *Spiraea discolor*, Pursh.  
 121 " " var. *ariaefolia*, Watson.  
 122 *Rubus Neo-Mexicanus*, Gray. *delin.*  
 123 " *strigosus*, Mx.  
 124 " *trivialis*, Mx.  
 125 *Cercocarpus parvifolius*, Nutt.  
 126 *Cowania Mexicana*, D. Don.  
 127 *Fallugia paradoxa*, Endl.  
 128 *Potentilla Thurberi*, Gray.  
 \* 129 *Amelanchier alnifolia*, Nutt. *rosa calif.* var.  
 130 *Fendlera rupicola*, Engelm.  
 131 *Ribes pinctum*, E. L. Greene. (Lvs.)  
 132 *Sedum Wrightii*, Gray.  
 133 *Eriogonum Hartwegii*, Benth.  
 134 " " var. *lavandulifolia*,  
 135 " *pinnatifida*, Nutt. [Watson.  
 136 " *trichocalyx*, Nutt.  
 137 *Gaura suffulta*, Engelm.  
 138 *Mentzelia albicaulis*, Dougl.  
 \* 139 " *aspera*, L.  
 140 " *Wrightii*, Gray.  
 141 *Mogarrhiza Gilensis*, E. L. Greene.  
 142 *Sicyos*  
 142a *Echinocactus wislizeni*, Engelm.  
 143 *Cercus Fendleri*, Engelm. (No fruit.)  
 144 " *pheniceus*, Engelm. (No fruit.)  
 145 *Opuntia arborescens*, Engelm.  
 146 " *sp.*? (Fruit.)  
 147 *Cymopterus montanus*, T. & G., var. *purpureus*, Gray.  
 \* 147a *Ligusticum scopulorum*, Gray, apparently.  
 148 *Penedanum nudicaule*, Watson.  
 149 *Lonicera dumosa*, Gray.  
 150 *Symphoricarpos oreophilus*, Gray.  
 151 *Mitracarpum breviflorum*, Gray.  
 152 *Houstonia n. sp.*  
 153 " *sp.*?  
 154 *Galium Fendleri*?  
 155 " *n. sp.*?  
 156 *Valeriana edulis*, Nutt.  
 157 *Stevia serrata*, Cav.  
 158 *Carpochaeta Bigelovii*, Gray.  
 159 *Baccharis carulascens*, Gray.  
 \* 160 " *ptarmicifolia*, DC., var.  
 \* 161 *Aciphaga acerosa*.  
 162 *Parthenium incanum*, HBK.  
 163 *Zinnia grandiflora*, Nutt.  
 164 *Sauvitalia Aberti*, Gray.  
 165 *Baileya multiradiata*, Harv. & Gray.  
 166 *Baileya pleniradiata*, Gray.  
 167 *Chrysopsis villosa*, Nutt., var.  
 168  
 169 *Galinsoga parviflora*, Cav.  
 170 *Vigniera cordifolia*, Gray.  
 \* 171 *Verbesina encelioides*, Benth. & Hook.  
 172 *Gymnoloma multiflora*, Benth. & Hook.  
 173 *Riddellia tagetina*, Nutt.  
 174 *Troximon aurantiacum*, Hook.  
 175 *Malacothrix Fendleri*, Gray.  
 176 *Helenium Hoopesii*, Gray, var.?  
 177 *Hieracium n. sp.*  
 178 " *sp.*?  
 179 *Hymenopappus flavescens*, Gray.  
 180 " *sp.*?  
 181 *Perezia nana*, Gray.  
 182 " *Wrightii*, Gray.  
 183 *Layia glandulosa*, Hook. & Arn.  
 184 *Carminatia tenuiflora*, DC.  
 185 *Pectis filipes*, Gray.  
 186 " *angustifolia*, Torr.  
 187 *Gaillardia pulchella*, Fong.  
 188 " *pinnatifida*, Torr.  
 189 *Gnaphalium strictum*, Gray.  
 190 *Melampodium cinereum*, DC.  
 191 *Aster adscendens*, Lindl.  
 192 " *tanacetifolius*, HBK.  
 193 " *multiflorus*, Ait.  
 194 " *canescens*, Pursh.  
 195 *Erigeron macranthus*, Nutt.  
 196 " *glabellus*, Nutt.  
 197 " *n. sp.*?  
 198 " *divergens*, T. & G.  
 199 " *delphinifolius*, Willd.  
 200 " *flagellaris*, Gray.  
 201 *Bigelovia Douglasii*, Gray.  
 202 " *graveolens*, Gray.  
 203 *Trixis corymbosus*.  
 204 *Gutierrezia eriocarpa*, Gray?  
 \* 205 " *Euthamia*, T. & G.  
 206 *Grindelia n. sp.*  
 207 *Bahia absinthifolia*, Benth.  
 208 *Hymenatherum polychaetum*, Gray.  
 209 " *pentachaetum*, DC.  
 210 *Aphanostephus Arizonicus*, Gray.  
 211 *Palafolia Hookeriana*, T. & G.  
 212 *Senecio aureus*, L., var.  
 213  
 214 " *longilobus*, Benth.  
 215 " *Rusbyi*, E. L. Greene.  
 216 " *n. sp.*?  
 217 *Aplopappus Parryi*, Gray.  
 218 " *laricifolius*, Gray.  
 219 " *spinulosus*, DC.  
 220 *Cosmos bipinnatus*, Cav., var. *parviflorus*, Gray.  
 221 *Stephanomeria minor*, Nutt.  
 222 " *Thurberi*, Gray.  
 223 *Hymenoxys Wrightii*, Gray.  
 224 *Cnicus Neo-Mexicanus*, Gray.  
 225 " *Parryi*, Gray.  
 226 " *undulatus*, Gray.  
 227 *Solidago Missouriensis*, Nutt.  
 \* 228 " *Bigelovii*?  
 229 *Villanova chrysanthemoides*, Gray.  
 230 *Ambrosia psilostachya*, DC.  
 231 *Artemisia Ludoviciana*, Nutt., var. [Mexicana, Gray.  
 232 " " var.  
 233 " " "

- 234 *Artemisia triserioides*, E. L. Greene.  
 235 *Kuhnia eupatorioides*, L.  
 236 *Brickellia oligantha*, Gray.  
 237 " *grandiflora*, Nutt.  
 238 " *Wrightii*, Gray.  
 239 " *floribunda*, Gray.  
 240 " *sp.*?  
 241 " *sp.*?  
 242 *Eupatorium Berlandieri*, DC.  
 243 *Berlandiera lyrata*, Benth. *multiflora*  
 244 *Pyrrhopappus Rothrockii*, Gray, var.  
 \* 245 *Heterospermum tagetinum*, Gray.  
 246 *Actinella Richardsonii*, Nutt.  
 247 " *odorata*, Gray.  
 248 *Encelia frutescens*, Gray?  
 249 *Thelesperma gracilis*, Gray.  
 250 *Campanula rotundifolia*, L., var.  
 251 *Arctostaphylos pungens*, HBK.  
 252 *Primula Rusbyi*, E. L. Greene.  
 253 *Forestiera Neo-Mexicana*, Gray.  
 254 *Fraxinus pistaciifolia*, Torr.  
 255 *Menodora scabra*, Gray.  
 256 *Ansonia Palmeri*, Gray.  
 257 " *var. mollis*.  
 258 *Aselepias involucrata*, Engelm.  
 259 " *longicornu*, Benth.  
 260 " *brachystephanu*, Engelm.  
 261 *Philibertia cynanchoides*, Gray.  
 262 *Gentiana Anarella*, L., var.  
 263 " *Rusbyi*, E. L. Greene.  
 \* 264 *Halenia Rothrockii*, Gray.  
 265 *Collomia aggregata*, T. & G. Porter.  
 266 " *longiflora*, Gr. (Sp. very poor)  
 267 " *Thurberi*, Gray.  
 268 *Gilia aurea*, Nutt.  
 269 " *hirsuta*, Gray.  
 270 " *inconspicua*, Dougl.  
 271 " *var. parviflora*.  
 272 " *Nuttallii*, Gray, var.?  
 273 *Eriodictyon glutinosum*, Benth.  
 274 *Nama dichotomum*, Ruiz & Pav., var. *angustifolium*, Gray.  
 275 *Phacelia circinata*, Jacq.?  
 276 " *crenulata*, Torr.  
 277 " *integrifolia*, Torr.  
 278 " *micrantha*, Torr.  
 279 " " E. L. Greene.  
 280 *Coldenia hispidissima*, Gray.  
 281 *Echinopspermum Redowskii*, Lehm., var. *cupulatum*, Gray.  
 282 " *ursinum*, E. L. Greene.  
 283 *Eritrichium Jamesii*, Torr.  
 284 " *leiocarpum*, Watson.  
 285 " *pterocarpum*, Torr.  
 286 *Heliotropium convolvulaceum*, Gray.  
 287 " *Cucassavicum*, L.  
 288 *Lithospermum angustifolium*, Mx.  
 289 " *multiflorum*, Torr.  
 290 " *Cobrense*, E. L. Greene.  
 291 *Mertensia paniculata*, Don.  
 292 *Onosmodium Thurberi*, Gray.  
 293 *Convolvulus incanus*, Vahl.  
 294 *Cuscuta squamata*, Engelm.  
 \* 295 " *sp.*?  
 296 *Evolvulus argenteus*, Pursh.  
 297 " *Arizonicus*, Gray.  
 298 " *sericeus*, Swz.  
 299 *Ipomoea costellata*, Torr.  
 300 " *Mexicana*, Gray.  
 301 *Ipomoea muricata*, Cav.  
 302 *Chamaesaracha Coronopus*, Gray.  
 303 " *sordida*, Gray.  
 304 *Datura meteloides*, DC.  
 305 *Lycium barbinodum*, Miers. (Fruit.)  
 306 " *pallidum*, Miers.  
 307 *Margaranthus solanaceus*, Schlecht.  
 308 *Nicotiana trigonophylla*, Dunal.  
 309 *Physalis viscosa*, L.  
 310 " *sp.*?  
 311 *Solanum elaeagnifolium*, Cav.  
 312 " *Jamesii*, Torr.  
 313 " *tuberosum*, L.  
 314 *Antirrhinum maurandioides*, Gray.  
 315 *Castilleja integra*, Gray.  
 316 " *linariaefolia*, Benth.  
 317 " *n. sp.*?  
 318 *Conoclea intermedia*, Gray.  
 319 *Cordylanthus Wrightii*, Gray.  
 320 *Maurandia Wislizeni*, Engelm.  
 321 *Mimulus luteus*, L., var.  
 322 *Orthocarpus purpureo-albus*, Gray.  
 323 *Pedicularis Mogollonicus*, E. L. Greene.  
 324 *Pentstemon acuminatus*, Dougl.  
 325 " *ambiguus*, Torr.  
 326 " *linarioides*, Gray.  
 327 " *punicus*, Gray.  
 328 " *secundiflorus*, Benth.  
 329 " *spectabilis*, Thurber.  
 330 *Serophularia Californica*, Cham.  
 331 *Aphyllon fasciculatum*, Gray.  
 332 *Conopholis Mexicana*, Gray.  
 333 *Chilopsis saligna*, Don.  
 334 *Anisacanthus Thurberi*, Gray.  
 335 *Lippia nodiflora*, Mx.  
 336 *Verbena bracteosa*, Mx.  
 337 " *bipinnatifida*, Nutt.  
 338 *Dracocephalum parviflorum*, Nutt., var.?  
 339  
 340 *Hedeoma Drummondii*, Benth.  
 340a " *dentata*, Torr.  
 341 *Monarda fistulosa*, L.  
 342 *Salvia ballotaeflora*, Benth.  
 343 " *Henryi*, Gray.  
 344 " *lanceolata*, Willd.  
 345 " *subincisa*, Benth.  
 346 *Stachys coccinea*, Jacq.  
 \* 347 *Tetraclea Coulteri*, Gray.  
 348 *Plantago Patagonica*, Jacq., var. *gnaphaloides*, Gray.  
 349 *Mirabilis multiflora*, Gray.  
 350 " *longiflora*, L.  
 351 *Boerhaavia spicata*, Choisy.  
 \* 352 " *purpurea*, Gray.  
 353 *Oxybaphus nyctagineus*, Sweet.  
 354 " *coccineus*, Torr.  
 355 *Allionia incarnata*, L.  
 356 *Selinocarpus chenopodioides*, Gray.  
 357 " *diffusus*, Gray.  
 358 *Polygonum tenue*, Mx.?  
 \* 359 *Eriogonum Abertianum*, Torr.  
 360 " *annuum*, Nutt.  
 361 " *alatum*, Torr.  
 \* 362 " *Wrightii*, Torr.  
 363 " *pharnaceoides*, Torr.  
 \* 363a " *microthecum*, Nutt., var. cf. *Tusum*, T. & G.  
 363b " *Wrightii*, Torr.  
 363c " *trichopodium*, Torr.

*Yucca a B. North & Co.*

*444*

- † 363d *Eriogonum polycladon*, Benth.  
 364 *Eurotia lanata*, Moq.  
 364a *Spirostachys occidentalis*, Watson.  
 × 365 *Teloxys cornuta*, Torr.  
 366 *Gomphrena caespitosa*, Torr.  
 → 367 *Urtica gracileuta*, E. L. Greene. = *U. Braunii*  
 368 *Celtis reticulata*, Torr. or *bracteata*?  
 369 *Morus parvifolia*.  
 370 *Platanus* sp.? (Fruit.)  
 371 *Salix longifolia*, Muhl.  
 372 " *lasiolepis*, Benth.  
 273 *Populus Fremontii*, var. (?) Wislizeni,  
 374 *Tragia* sp. [Watson].  
 375 *Croton corymbulosus*, Engelm.  
 376 " *Texensis*, Mull.  
 377 *Acalypha Lindheimeri*, Mull.  
 378 *Euphorbia bilobata*, Engelm.  
 379 " *extipulata*, Engelm.  
 380 " *albomarginata*, T. & G.  
 381 " *campestris*, Cham. & Schl.  
 382 " " var.?  
 383 *Alnus oblongifolia*, Torr.  
 384 *Quereus undulata*, Torr.  
 385 " *hypoleuca*, Engel. (No fruit.)  
 386 " *grisea*, Liebm.  
 387 " *Emoryi*, Torr. (Lvs.)  
 388 " *pungens*, Liebm.  
 389 *Phoradendron flavescens*, Nutt., var.  
 390 " *juniperinum*, Engelm.  
 391 *Arceuthobium robustum*, Eug. (Lvs.)  
 392 *Comandra pallida*, A. DC. (Fruit.)  
 393 *Pinus strobiformis*, (Fruit.)  
 394 *Picea Sitchensis*, Carr. (Fruit.)  
 395 *Pseudotsuga Douglasii*, Carr. (Fruit.)  
 396 " " var.? (Fruit.)  
 397 *Cupressus Arizonicus*, E. L. Greene.  
 398 *Ephedra antisiphilitica*, C. A. Meyer.

- 399 *Habenaria sparsiflora*, Watson. ?  
 400 *Epipactis gigantea*, Dougl.  
 401 *Iris Missouriensis*, Nutt. (Fruit.)  
 402 *Sisyrinchium Arizonicum*, Rothr. (Fr.)  
 403 *Hesperanthes Torreyi*, Watson.  
 404 *Allium cernuum*, Roth.  
 405 " *Bigelovii*, Watson.  
 406 *Zygadenus porrifolius*, E. L. Greene.  
 407 *Brodiaea pauciflora*, Gray.  
 408 *Calochortus Gunnisoni*, Watson.  
 409 *Yucca baccata*, Torr.  
 410 " *angustifolia*, Pursh.  
 411 *Agave Parryi*, Engelm. (Only fls.)  
 412 *Nolina crumpeus*, Watson.  
 413 *Dasyllirion Wheeleri*, Watson.  
 414 *Tradescantia tuberosa*, E. L. Greene.  
 415 *Commelyna linearis*, Benth.  
 416 *Equisetum levigatum*, A. Braun.
- A *Gymnogramme hispida*, Mett.  
 B *Notholaena sinuata*, Kaulf.  
 C " *Hookeri*, D. C. Eaton.  
 D " *dealbata*, Kunze.  
 E " *Grayi*, Davenport.  
 F *Cheilanthes Wrightii*, Hook.  
 G " *lanuginosa*, Nutt.  
 H " *Eatonii*, Baker.  
 I " *Fendleri*, Hook.  
 J " *Lindheimeri*, Hook.  
 K *Pellaea atropurpurea*, Link.  
 L " *Wrightiana*, Hook.  
 M " " (the *P. mucronata* form.)  
 N " *andromedaefolia*, Fee, var. *pubes-*  
     *cens*, Baker.  
 O *Woodsia Mexicana*, Fee, var.  
 P " " "  
 Q *Cystopteris fragilis*, Bernh.



Benne or Bene seed. *Sesamum Indicum* order Pedaliaceae. <sup>(of Malay origin)</sup>  
 Castor-oil bean. *Ricinus Communis*. A native of India.  
 Camphor tree. *Camphora* " " ? Order Lauraceae.  
 Lognat. *Photinia (Erythrina)* Japonica. China & Japan.  
 Phoenix sylvestris found throughout India (the wild date-palm) is probably the tree  
 from wh. the date-palm (*P. dactylifera*) was originally derived.  
 Paddlewood, a tree of Guiana, *Rapidosperma excelsum* of the Apocynaceae.  
 also called wheel-tree from the form of a section of the trunk.  
 Sea-bean - Leguminous climbing plant, *Eutada scandens*, growing  
 in the tropics of both hemispheres, and remarkable for the size of its  
 pods. Beans two inches across and half an inch thick.

Benne Seed,  
 (*Sesamum orientale*)  
 of the East Indies  
 St. Helena, So. Caroline

Florence Ruth

Olga

~~Annie~~

Kamala

~~Lytia~~

Mr. Dorville



*Erythraea microstachya*  
(white forget-me-not)

5-2

[Native]

61 - *Erechtthites* P. 269.  
Cream-colored flowers.

81 - *Pyrrhopappus* p. 280.  
Yellow flowers - (Stiff seeds.)

83. *Lactuca*

New Boston, N. H.



*Machæra patula*  
Newport Cal. Dixon  
*Pecten moniliformis*  
*Bulla Gouldiana*  
(formerly *nebulosa*)

"

- 1 *Magnolia* (103)  
*grandiflora*
- 2 *Coff. lachryma-Jobi*  
(*"Job's Tear"*) (20)
- 3 *Cinnamomum*  
*camphora*  
(Camphor Tree) (104)
- 4 *Eriobotrya Japonica*  
(Loquat or Japanese  
Plum) (105)
- 5 Fan Palm var. (106)
- 6 Date Palm var. (107)

"

I do not know the palms  
and there are a great  
many here cultivated as  
shade trees. I throw away  
the dead *Machæra* - I put  
it in to show the size they  
attain. Never get them alive.

alter.  
the bot with this

- 1 <sup>402</sup> *Chlorogalum pomeridianum* Kunth
- 2 *Calochortus splendens*. Dougl  
"Mariposa Lily"
- 3 - Onion Lily (Greenhouse)
- 4 <sup>399</sup> *Schizodiscus Elliottii* (Greenhouse)
- 5 - *Brodiaea capitata* Benth
- 6 <sup>394</sup> *Bloomeria aurea* Kill.  
"Golden Stars"
- 7 - *Asparagus Sprengelii* (Greenhouse)
- 8 - " *plumosus* "
- 9 *Yucca Whipplei* Torr (native)
- 10 <sup>415</sup> " *alvifolia* (Garden)
- 11 <sup>398</sup> *Gladiolus Lemonii*
- 12 *Amaryllis Johnsonii*
- 13 <sup>400</sup> *Lilium candidum*
- 14 *Fritillaria biflora* Lindl (native)  
<sup>397</sup> "Chocolate Lily"
- 15 *Asparagus megaloides* (Garden)  
Smilax
- 16 <sup>396</sup> *Hookera hyacintha* Garden & Native
17. A Daisy that grows in my neighbor's  
<sup>400</sup> garden and I call "Lydia's daisy"  
till I get a better name. The white  
rays are long and the centre is blue

the foliage only - not very attractive  
in the land of beautiful plants.

184<sup>40</sup> *Atriplex californica* Andr. Beach

194<sup>41</sup> " *fraterna* " "

20<sup>393</sup> *Convolvulus occidentalis* (Native)

21 *Plagiobothrys canescens* Benth.

892 One of our many wild white  
forget-me-nots

22<sup>391</sup> *Stephanomeria virgata* Benth.  
(Composite)

23<sup>390</sup> *Rosa californica* Cham

24 *Romneya Coulteri*. (Native)

White-Poppy

25 *Ipomoea hederacea* (Garden)  
"Moonflower"

26 *Eucelia californica* (Native)  
Composite

27<sup>390</sup> *Streptanthus polygaloides* Gr  
Cruciferae



- 1 Cultivated Daisy, white and blue. Note the heads plumed at both ends. Did you ever see that in a seed before?
- 2<sup>42</sup> *Negundo californica* D & G.  
Box Elder
- 3 Mesquit Bean. From Imperial Co. Cal.  
Have no way of analyzing it but shall send for some more of the plant.
- 4<sup>42</sup> *Quercus agrifolia* Nutt. "Live Oak". (This may or may not be "Live Oak". I suspect.)
- 5 *Ononis lanceolata* L.  
Bull Thistle.
- 6<sup>43</sup> *Xanthoxylum spinosum* L.
- 7<sup>43</sup> Cedar of Goa. (Shrub tree)
- 8<sup>43</sup> *Fraxia alba*
- 9<sup>43</sup> *Senecio asper*
- 10<sup>43</sup> *Echinodorus rostratus*. Engelm.  
Water Plantain
- 11<sup>43</sup> *Convolvulus occidentalis* Gr
- 12<sup>44</sup> *Crepis virens*
- 13 *Rhus ovata*. (Lemonade berry)
- 14<sup>44</sup> *Hydras californicus*. Torr.
- 15<sup>43</sup> *Hydras* sp? (Garden - spotted species)
- 16<sup>43</sup> *Diospyros kaki* Linn.  
Japanese Persimmon.
- 17<sup>43</sup> *Maurandia semperflorens*  
Garden
- 18<sup>43</sup> *Cornus Nuttallii* And.  
Dogwood.

March 22. 1907

1. <sup>293</sup> *Anagalis arvensis* Linn  
(Orange. (Pimpernel))
2. <sup>294</sup> *Ecklonia californica* Cham  
(Orange.)
- 3 *Sarcocolla robusta* Pursh.  
<sup>295</sup> *Aliso* Canon. (Salt Marsh Bulrush)
- <sup>296</sup> 4 *Chrysopsis argentea* var *rufida*, Gray
- <sup>297</sup> 5 *Acacia decurrens*. Street Tree. (Black Acacia)
- <sup>298</sup> 6 *Polygonum lapathifolium* L.  
Common Knotweed or Smartweed.
- <sup>299</sup> 7 *Datisca glomerata* B & H. Datisca
- <sup>300</sup> 8 *Solidago viridifolia* Gray.)
- <sup>301</sup> 9 *Cucurbita perennis*. Gr  
(Gourd - Mock Orange)
- 10 *Salix lasiophylla* B. & P.  
<sup>302</sup> (Arroyo Willow)
- <sup>303</sup> 11 *Solidago occidentalis* Nutt.)
- <sup>304</sup> 12 *Asclepias mexicana* Cav.)  
(El Toro Canon.)
- 13 *Erodium moschatum* L'Her  
<sup>305</sup> (Musky Fillagree)
- 14 *Clematis lisantha*. Nutt.  
<sup>306</sup> *Laguna* Canon. Santiago Canon
- 15 *Galium angustifolium*. Nutt  
<sup>307</sup> Santiago Canon
- 16 *Brickellia californica* J. & G.  
<sup>308</sup> Santiago Canon.
- 17 *Pelargonium cucullatum*  
<sup>309</sup> (Lady Washington)
- 18 *Rhus diversiloba*  
<sup>310</sup> Porir Canon. (over)

1930<sup>d</sup> *Chenopodium Californicum*  
Soap Plant

2030<sup>9</sup> *Macroceris macrochaeta*. Gray

21<sup>10</sup> *Senecio Douglasii* DB

22<sup>31</sup> *Baeria chrysostoma* F & M (Smushine)

23<sup>31</sup> *Franseria Hookeriana*

24<sup>31</sup> *Erca virens* L. (wales Hemlock)

25<sup>31</sup> *Cercocarpus ledifolius* Nutt.  
(monulani ... gang) Santiago Canon.

26<sup>31</sup> *Senecio occidentalis* (Red Thistle)

27 *Conna* sp? (Large yellow-spotted)

28 *Pentstemon cordifolius* 316

29 *Asler occidentalis* Nutt 317

30 *Adenostoma fasciculatum* H & A 318

31 *Jasminum officinale*  
(White Jasmine). Garden 319

32 *Drosera glauca* 320  
Silverado Canon.

33 *Chenopodium anthelminticum* 321  
(Wormseed)

34 *Pluchea camporata* DC 322  
Salt-Marsh Fleabane

35 *Centauria melitensis* L  
Star Thistle (Sent last year)

36 *Ipomoea hederacea*  
(Blue Moon Flowers. Garden. 323

37 *Clematis ligusticifolia*. Laguna Canon

38 *Heterotheca grandiflora* Nutt. 324

39 *Verbena anabala* (Purple Verbena) Garden 325

40 *Helianthus annuus*. Field Sunflower 326  
Same name as your garden species  
same as Russian Sunflower. but the seeds

very different.



- 41 *Teuoma jasmimoides* Garden 327
- 42 Flowering Bean. (I do not know the name  
but the plant is well worth a place  
in the garden. and I mean to plant it. 328
- 43 *Calceolus vulgaris* var *citrinus*. 329  
(Ciltron) Grows wild - immense  
oblong, pale green, looking like  
watermelons. Probably an escape  
they are growing along the R.R. track.  
The varietal name is my own, for  
they are ciltron.
- 44 *Medicago sativa*. L. (Alfalfa) 330
- 45 *Lathyrus latifolius* (Perennial)  
(Sweet-Pea 331
- 46 *Capricum annuum*. Linn ~~332~~  
(Chile Peppers)
- 47 *Asparagus Sprengelii* (Greenhouse 332
- 48 *Xanthium canadense* var *echinatum* 333 333
- 49 *Acacia* sp? This is a shrub. I am  
not up to acacias, but I hope to some 334  
day find a way to know their specific 334  
names so we have many here. trees  
& shrubs, in cell.
- 50 *Begonia Englemanni*. (Garden) 335
- 51 *Calochortus splendens* Dougl. 336  
(Mariposa Lily) Arch Beach.
- 52 *Rhynchospora microstachya*. Greene  
Laguna Canon (White Forget-me-not 337
- 53 *Atriplex cordulata*. Jepson 338
- 54 *Punica granatum*. Cull  
(Pomegranate)
- 55 *Heteromeles arbutifolia*. Roem.  
(California Holly)
- 56 *Amaranthus chlorostachya* 339 339  
(over)

- 57 *Agave americana* . (Century Plant)  
 58 *Psidium cattleyana* . (Guava) 341

Among these are quite a number where there are very few seeds. These I have made a note of, and will try to get more this summer. Meanwhile they will "hold down the name" as Mrs. Buzgik says.

19<sup>432</sup> *Baccharis viminea* D. C.  
Walter Moley. (a willow like  
shrub)

20 *Baeria chrysotheca*.  
Simohine

21 *Foeniculum vulgare*.  
Fennel. (wild here, probably  
escaped)

22<sup>443</sup> *Hemizonia Hermannii*  
Terrestrial (one of many)



80

(red beans)

and 3 p. 8. 8.

*Solanum elaeagnifolium*  
*Solanum elaeagnifolium*  
*Solanum elaeagnifolium*  
*Solanum elaeagnifolium*

*Paulownia tomentosa*  
 277 Fuzzy seeds

*Podocarpus* 278

*Podocarpus*  
*Podocarpus*  
*Podocarpus*  
*Podocarpus*  
*Podocarpus*

*Opuntia*, 279 *Opuntia*  
*Acacia* etc. *Acacia*

Mar. 10, 1906.

W. G. Dwyer

- 1) *Luffa cylindrica* Rein. 180  
"Disheag" (Garden)
- 2) *Tageetes erecta*. Marigold (Garden)
- 3) *Plantago lanceolata* <sup>sim</sup> 182 (Native)
- 4) *Malva parviflora*. Linn. (Native) 183
- 5) *Bonchus oleraceus*. Linn (Native) 184
- 6) *Australicum* Pea (Garden) 185
- 7) *Isomeris arborea* Nutt. (Native) 186
- 8) *Geranium zonale* (Garden) 187
- 9) "Gillyflower" (Garden) 188
- 10) *Scabiosa* (Garden) 189
- 11) Spotted agave (Garden) 190
- 12) *Persimmon*
- 13) *Brassica campestris* L. (Native)  
Wild Turnip. { Looks exactly like mustard  
but differs in leaves, in seeds  
and in seed capsules 191 }
- 14) *Brassica nigra* Boiss. (Native Mustard) 192
- 15) *Cupressus macrocarpa* 193  
Monterey Cypress
- 16) *Ceanothus* sp? (small red blossom)
- 17) *Raphanus sativa* L. (Native)  
Wild Radish 194
- 18) Onion Lily (Greenhouse) 195
- 19) *Foeniculum vulgare*. Adams' 196 (Native)
- 20) *Layia platiglossa* Gray. "Dilly Dips" (Native) 197
- 21) *Rhus integrifolia*. B. & K. (Native)  
"Lemonade Berry" 198
- 22) *Picea communis* (Red) (Native)
- 23) " " (Green) (Native) 199
- 24) *Sorbus* Peach 200
- 25) "Horse Beans"

- 26 Apricots. 202
- 27 *Lavatera asurgentifolia* <sup>ferax</sup>. Tull. 203  
wied cut probably introduced
- 28 *Mesembryanthemum crystallinum*  
Native. "Ice Plant" 204
- 29 *Datura tatula*. (Native) We have  
+ five species, the seeds of which are  
alike. There are here besides *tatula*,  
*stramonium* and *discolor*.  
Another year I shall take pains to  
separate them, and will send  
them to you as if you wish it. 205
- 30 *Amaryllis johnsonii* (Red Lily Garden) 210
- 31 *Lageaatrocinia Indica*. (Grape Myrtle.) 211
- 32 *Clea maculata*. (Cactus in greenhouse) 212
- 33 *Crocodium cicaturium*. L. (Native) 213
- 34 *Tiburnum tinus*. (Laurestinus) 210
- 35 *Ficus elastica*. (Rubber Tree.) 211
- 36 *Melia azedarach*. (Umbrella Tree) 212
- 37 *Bidens pilosa* = *frondosa* Linn (Native) 213
- 38 *nicotiana glauca*. (Tree Tobacco) (Native) 214
- 39 *Erigeron canadensis*. 214 (Native)
- 40 *Phaseolus* var?
- 41 *Ariscaria Bidwellii*. 215
- 42 *Medicago densicathrata*. "Bar Clover" 216  
Native. I shelled out enough of them  
for a meal but they seem to be mislaid.  
I will send you more if I can find any -  
it is late for them.
- 43 *Richardia africana*. (Colla Lily) 217  
a poor lot, will try and find some better
- 44 *Ariscaria Bidwellii*. There are seeds  
inside the scales. 215
- 45 *Pinus Coulteri*. 216
- 46 *Opuntia prolifera*. 217 237 217
- 47 *Centauria melitensis*. (Star Thistle) (Native) 218
- 48 *Passiflora caerulea*. (Passion Flower) 218



- 49 *Yucca whipplei*. Torr. (Native) - 19  
 50 *Opuntia Engelmannii*. Pringle Pear  
 (Native)  
 51 *Bigelovia semila*. Gray. (Native) 221  
 52 *Chaenactis glabrescens*. (Native) 222  
 53 *Encelia Californica*. (Native) 223  
 54 *Verbesina densita*. (Native). Found<sup>224</sup>  
 by me, not before collected in the U.S.  
 55 *Melilotis parviflora*. (Yellow sweet-  
 clover. Native)  
 56 *Asparagus nudicola*. (Smilax)  
 57 *Romneya Coulterii*. (Poppy. Native)  
 58 *Daucus pusillus*. Michx. 228  
 Rattlesnake weed. (Native)  
 59 *Asparagus plumosus*. Greenhouse Fern<sup>229</sup>  
 60 *Lathyrus vestitus*. (Wild Sweet-Pea) 23  
 61 *Eriogonum Californicum*. (Native) 231  
 62 *Eriogonum setigerum*. (Native)  
 Turkey Mullerin. 232  
 63 *Fragaria Californica*. (Wild Strawberry) 233  
 64 *Asclepias eriocarpa*. (Milkweed) 234  
 65 *Amaranthus albus*. (Tumble weed) 235  
 42 *Medicago densa*. (Bar clover) 236  
 66 *Brodiaea capitata*. 236 236

Gutta Percha Singapore  
 Sea weed from Calif. 1 piece  
 Spines of Sea urchins 5. (3 or 3?)  
 Butterflies Troilus & Dalis  
 Land Dollars isentius? 2  
 { Echinorachnus parma 2 or 5?  
 Land Dollars 3  
 Melitaea letradrina 3 Texas  
 Sea Biscuit small 1  
 Gorgoni (yellow) 1

April 4, 1899. Mrs. E. D. Ramsay

Skate's Eggs 2 No. Weymouth

Silk-worm cocoon

9-fingered Star 1

Medusa 1

Sea-horse 1

Flounder 1 Young Skate No. Weymouth

Sea worms 2 - different

Prickle Stars 2 "

Red Star

Small Stars 3 All different

May 8, 1897

Starfish 1 Florida Mr. R. Johnson

" 1 " " "

Urchins 2 " " "

Sea-horse 1 " " "

Tridacna 1 E. W. Johnson Mass. West. 1

July 17.

Loose Worms 12 Wanda 1

Aug. 27.

Piece of Petrified Wood 1 Mrs. Kober.

Nov. 20.

Mrs. E. D. Ramsay.

Oct. 28. Sch. Brilliant

Test of Sea-urchin Coral - Bahamas

Nov. 20. Mrs. E. D. Ramsay.

Starfish 1 Wanda 1

Sea-horse 1 Carpe 1

Phrynosoma 1 Wanda 1

Flounder 1 Wanda 1

Dec. 13. Miss Goldsmith  
 12 pieces Green Soap.

Nov. 20. Mrs. E. D. King Contd.  
 Chinese Nets 3  
 Lin. Oak worms 6 Yaka shells.  
 Sea-weed 2 Monterey Bay  
 Green ramules 2 "  
 "Hagfish with spines small 3 "  
 Shrimp 1 "  
 "Ramule. "  
 "in Pecten Whale 1 "  
 Seaweed & Feather moss "

Feb. 25. 1898 Wheeler  
 Sea-bean Yellow 1  
 " Red (long) 1  
 " Gray 1  
 " Black 1  
 " Black-eyed Susans 2  
 Bastor Beans 1  
 " like Bastor but small 2

Greenleaf

Apr. 7 3 Red & Black Sea beans  
 May. 7 Bahama Sea Beans

July - Piece Flint among  
 father's things

Nov. Greenleaf - small <sup>large opening</sup> <sup>working</sup>

" Mrs. Haw. Starfish.

Dec. 15 Mrs. W. E. Casnach 3 stones.  
 { 2 pieces Oxide & Carbonate Lappet  
 1 piece coarse Granite

Mar. 14, 1899. Mrs. E. D. Rankay  
 Green Beetles of Brazil  
 Clay statu from Gargoyle in  
 glass tube.  
 Gorgonia (reddish)  
 Sawfish Jaw (small)  
 Tamarind pods. L. V. ...  
 Pressed Flowers.  
 Sand from Sahara.  
 Jaw of Parrotfish  
 " " ?  
 Worm tubes.



1 small piece black jack  
with dolomite - (broken) Aurora  
Spencer.

Jack in mass - Spencer  
Load (Spencer) ~~comes~~ cut off.

From Wagner mine —  
 Marcasite — find piece  
 Lead — Largest piece H. D. \*

One tiny lead crystal with mar-  
casite crystals. Harold

1 Hm lead crystal +  
2 fine granos brown  
Blanket vein mine + Fawcett

gave me  
Lupine seed - (Rabbit?) &  
All from Persimmon seed.

Mar. 17, 1903 Mrs. E. P. Ramsay  
Large Starfish — West Indies?  
3 small Green Hermit Crabs  
2 or 3 Crinoids (small ones)

Sea urchin very small 100  
Land Dollar tiny 100

*Mrs. Whelpley*

*May 1899. Flat light brown hairs 3 W.S.*

*Purple I. B. Whitely*

*August 1899. Tiny stars whitish blue 10*

Dec. 11. W. 100  
 Microcrystalline } Phlogopite. 5  
 Apatite (crystalline) } 1  
 \_\_\_\_\_  
 1 } Templeton, Vermont.  
 in 100 ft. 200 ft.

June 1899. Mrs. E. D. Ramsay (16)  
Melitaea ♂ dead  
(Po. Cardin. Dr. Min.) gave me 5 *Spencer*

July 1900. <sup>Pacific Grove, Mass.</sup> Sea Urchins alive  
5 to 12. Stars (Quite a number)

Lichens

July 13 to 30, 1905      S. Orleans.  
 Worm tubes? or coral? 2 or 3 sp.      3  
 Sponges - one? or more sp.?  
 Land dollars alive many  
 "      dead      "

6 East Orleans Mass  
 July 1900 Urchin dead  
 several very small  
 Stars the worst of the one  
 good large live one.  
 Cerata bright red 10  
 Cerat crimson red 1  
 and large claws.  
 Claw of another crab? (Pinn)  
 Oct. 1900 Mrs. Bradshaw  
 Sponge & species have kept 3 sp.

Coal - two specimens  
 Jan. 1901 Urchin Newport Bay Cal. 4  
 " Arch Beach 2  
 Sand dollars Newport Cal. 6

June 1901 Mrs. H. B. Stann  
 Purpura cincta egg cases (clump) 1  
 Large Barnacle 1

July 1901 E. Orleans  
 Horse shoe crabs -

Sept. 1901. 2 Sea urchins large with spines  
 E. Orleans. N. L. Johnson

Oct. 1901 - Arrowhead - Mrs. Whitney Carthage -  
 June 11, 1902 Melitaea (Dr. Hill) (dead) 10  
 L. Cardine Mrs. E. D. Ramsey

" Shark's tooth Fossil?  
 Mrs. E. D. Ramsey about 50

Oct. 1901 Fossil Shell best Mrs. Whitney  
 Dec. " " Carthage. largest Harold  
 " " " Carthage medium Spencer.

Oct 1901 - Large white Arrowhead Mrs. Whitney

1901 - 3 pieces pod of cocoas Miss Broad  
 Some cocoas and  
 3 Ivory nuts.

Sept to Jan 1902 From the Phoenix mine.  
 Jack - small crystals - large pieces N. L. H.  
 " larger " - small pieces  
 From Phoenix Mine Prosperity Mo  
 3 pieces silicate from  
 Prosperity Mo. small gas in  
 Caliche 1 large 3 small pieces  
 Aurora Mo - Spencer. One

June 1913. These fossils from Texas  
from Mrs. J. G. Bayliff (Engene)  
(human skulls and 1 broken arrowhead)

(98)

Jan. 28, 1903.

Litchi Nuts -

Chinese Nuts Seeds (2 kinds)  
one each.

" Fruit. 1

" Food 3 kinds.

Chinese Tea in bundles. M. E. L.

Sapodilla seed. S. Am. M. G. D.

Walze Syria

" Ground Wheat "

Lentils "

June 1903 Chinese Sacred Candy! M. E. L.

" Nut similar to Litchi! "

Spodumene Sterling Mass.  
June, 1903.

Pescadero Stones M. G. Day  
Pescadero, Calif.



10 March. 14, 1906.

*Histaria consequana* Benth. Chinese *Histaria*.

*Gleditschia triacanthos* L.

Three-thorned Acacia, or Honey Locust.

*Catalpa bignonioides* Walt.

*Catalpa*. Indian Bean.

*Aristolochia Liphos*, L'Her.

Pipe-Vine. Dutchman's Pipe.

Box of 14 fine specimens from W. S. Hein Spring 1907.

Piece of glass (iridescent) from

Spanish galleon sunk in Caribbean Sea about a hundred years ago. The glass was brought up from the wreck after it had been under water forty years, Mr. Thos. Freeman when a boy, obtained it from the vessel that went to explore the wreck hoping to find treasure and which was, in turn, wrecked off Hamlet Harbor on the return trip. July, 1907.

Sand from Block Island M. G. D.

3 agates from Puget Ld. M. G. Darg <sup>Aug. 1907.</sup>

2 Shark(?) eggs and 1 Skate Egg <sup>July 1907</sup>

Dec. 1907. M. F. B.

Cornus — About 15 sp.

*Cornus lanceolata*. Bull Thistle.

*Euphorbia splendens*. Crown of Thorns.

White Jasmine Pods

*Megarrhiza merah*. Skeleton of the  
Childerthe Burr.

Lichens from Big Trees

Bracts from Bamboo — in garden.

Feather Moss — ~~sent~~ to Mrs. Kuyper

Living Moss

Starfish. Larger than any I had.

Mussel — (*Mytilus Cal.*)

Colours Bohemian.

June, 1911. Brown sealion, with a red scar, from J. E. C. One of the mouse eye hairs.

Tiny piece lead - Harold.  
Missouri Blanket Iron Mining Co.

---

Phoenix — Jack  
Pelican etc. (W.D.N.)

(Balaric. I in lead several pieces)  
2 good pieces situated (marked)

Wagner ? Marasich + lead  
Easterville or Webb City

Atlas —

Merora 3 pieces Galilei  
1 large piece "  
(Dolomite + Jack)







Metals Product of Franklin  
Tuesco Co. N. J.

Lehalle

Pipe St. Minn.

Norwalk Arkans

Saltpeter Crystal

Wepk Laga Crystal

Blue Vitriol Box So 4

Lana

Perpetites Yellowstone Pk Montana

Variogated Marble Plymouth Vt.



Prehnite 3 Somerville

Garnets Dedham Mass.

" Haverhill N. Y.

" Reading Conn.

" Pseudomorphs G. - Spencer

Lincolnton Barre Mass.

Wine Spar " "

Lincolnton Barre " "

" Camden Mich. ph

Ouzes 2

Anthrophyllite Burlington Ch.

Actinolite Cavendish Vt.

Amphibole Haverhill R. I.

Hamblen Barre Mass.

Anthrophyllite Gorham Mass.

Black Quartz Dutch Flat Cal.

Pressed Quartz Wilkes N. H.

Milky " "

Rose " "

" " "

Petite Smoky " "

Smoky " Wilkes "

Crystal " "

Pink L. W. Kearsarge

Quartz Rock N. Adams.

Granulated L. Wilkes

Milky L. Wilkes

Rose " "

Pressed " "

Smoky " "

Black Dutch Flat Cal.

Spongy from Dutch Lake Pipe

Flint. Pelham Mass.

" —

Carnelian Pebbles 2 N.S.  
" " 12 Miss. R.

Carnelian Polished  
Agates 3. Rocky Mts Mr. M.

Agate  
(Agate)

Amethyst. Lake Superior 2  
" Wore S.  
" Aunt M.

2 Pumice  
2 Quartz Crystals

" "  
" " Gorham N. H.

" " Hot Spring Ark.  
Linky 2. Crystals Mr. M.  
Part of Crystals Bridgeport Mass  
2. Crystals Herkimer Co. N.Y.  
" " Texas

Garnet Pebbles Marble head  
Iron Sand Pebbles

3 Grades

Part of G. Alden Iowa  
" Keokuk Iowa  
Grade " "

" Chalcidung G. " "

4 Asbestos S. L. D. H.

" Staten Id. N. Y.

" Italy

Mineral Hot Colorado.

Asbestos? Cent Ar.

or Pinnite?

" Mr. R. Well

Pinnite? Central Ar.

5. Magnetite Penn. Maron

"

Hematite Pierpont N. J.

" Eng.

Minerals H. Colorado

Asbestos from Italy



Foliated Steatite Rome Mass.

Steatite " "

Talc Lincoln R. I.

Talc ? " "

Talc Rome Mass.

" Spar H. Lawrence Co N. Y.

Silicified Wood 2 Mass.

Carbonate crystals 2 Water

Obsidian Yellow Stone PR

Epidote crystals Sugar Hill  
2 (N. H.)

Copper ?

Diamond Drill Core, Wash

Gay Head Clay Aunt M.

Toad-stone Georgetown Mass.

Scapolite ? Buxton Mass.

" ? with Apatite ? " "

Amfibrous Earth Carbonate

Green Feldspar Rockport Mass.

Boltinite with Limestone  
Bolton

Obolite - calcite - Chelmsford

Selenite N. Greenland

" Plymouth Vt.

Mica Muscovite Wilmot - Vt.  
3

Marble White N. Adams

Mica (Plumose) Wilmot

Epidote ? Limer Vt.

Black Mica (Biotite) R. I. S. S.

Dendrite on Limestone Smithfield

Jasper, Langens. Mass.

" Berlin N. H. 5

Diatomaceous Earth Richmond

" " Plymouth

" "

Graphite

Breccia

Dendrite on Argillite - 2

"

Leptynite - Plymouth Ct.

Seneca Sandstone Dorchester  
Md.

E. L. R.